



Examining Barriers to Adequate Prenatal Care Utilization in Dutchess County

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Background

- Early and regular prenatal care (PNC) reduces the risk of both poor maternal and infant health outcomes. Previously cited barriers to adequate PNC include:
 - Transportation - Healthcare System
 - Distance - Childcare
 - Health Insurance - Mental Health
- Healthy People 2030 Goal:** "Increase the proportion of pregnant women who receive early and adequate prenatal care"
- Goal: To improve the rate of adequate prenatal care utilization in Dutchess County, NY**

Objectives

- Quantify PNC utilization among Dutchess County residents
- Determine what socioeconomic/demographic factors may be linked to less than adequate PNC
- Develop and administer a survey to members of identified populations to further understand barriers they may be facing

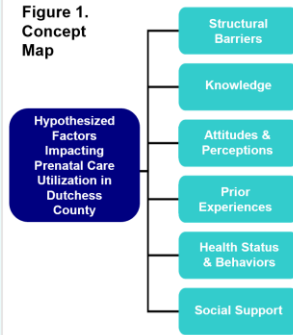
Analysis Methods

- Data source: 2021/2022 Dutchess County resident birth certificate (BC) data from the NYS Perinatal Data System
- Adequacy of Prenatal Care Utilization (APNCU) Index
 - Uses month of PNC initiation, ratio of observed to expected number of PNC visits, and gestational age at birth to group into one of 4 categories
 - Records missing month of initiation, number of visits, or gestational age excluded from analysis

APNCU Index	Timing of Initiation		Ratio of Observed to Expected Visits
Inadequate	Months 5 – 9	OR	< 50%
Intermediate	Months 1 – 4	AND	50 – 79%
Adequate	Months 1 – 4	AND	80 – 109%
Adequate Plus	Months 1 – 4	AND	110%+

- Less than adequate PNC: inadequate + intermediate

Figure 1. Concept Map



Survey Methods

- Developed a concept map (Fig 1) based on BC analysis and literature review
- Questions focused on PNC knowledge and access, as well as general health care behaviors and experiences
- Quantitative and qualitative questions
- Pilot survey – 15 questions to gauge community willingness and test questions, includes at least 1 question from each factor, as well as general demographic information
- Thus far, the survey has been administered at a community health fair, we are working on identifying other venues for administration

Scan for Survey



Analysis Results

- Figure 2 summarizes results from BC analysis, showing characteristics with statistically significant differences between APNCU index categories
- Significant characteristics that helped to inform survey administration include age (**less than 20**), education (**less than high school**), insurance status, (**Medicaid/Other**), and race/ethnicity (**multiple & minority races**)

Table 1. Preliminary Survey Results

Domain	Responses (n=7)
Structural Barriers	Most common response: transportation/distance related issues (3/7)
Knowledge	Most respondents (6/7) knew what prenatal care is and where to get it when pregnant
Attitudes & Perceptions	- All respondents agreed/strongly agreed that prenatal care is important - Most common response regarding importance of prenatal care: Health of mother and baby
Prior Experiences	2/7 respondents stated that they have had negative experiences with the healthcare system that deterred them from seeking care
Health Behaviors	About half of respondents (3/7) stated that they don't get regular check ups
Social Support	All respondents stated they had a supportive person in their life during pregnancy

Next Steps

- Continue survey administration
- Analyze 2023 birth certificate data to understand trends
- Form a focus group with community members to collect additional qualitative data regarding barriers to adequate prenatal care

References

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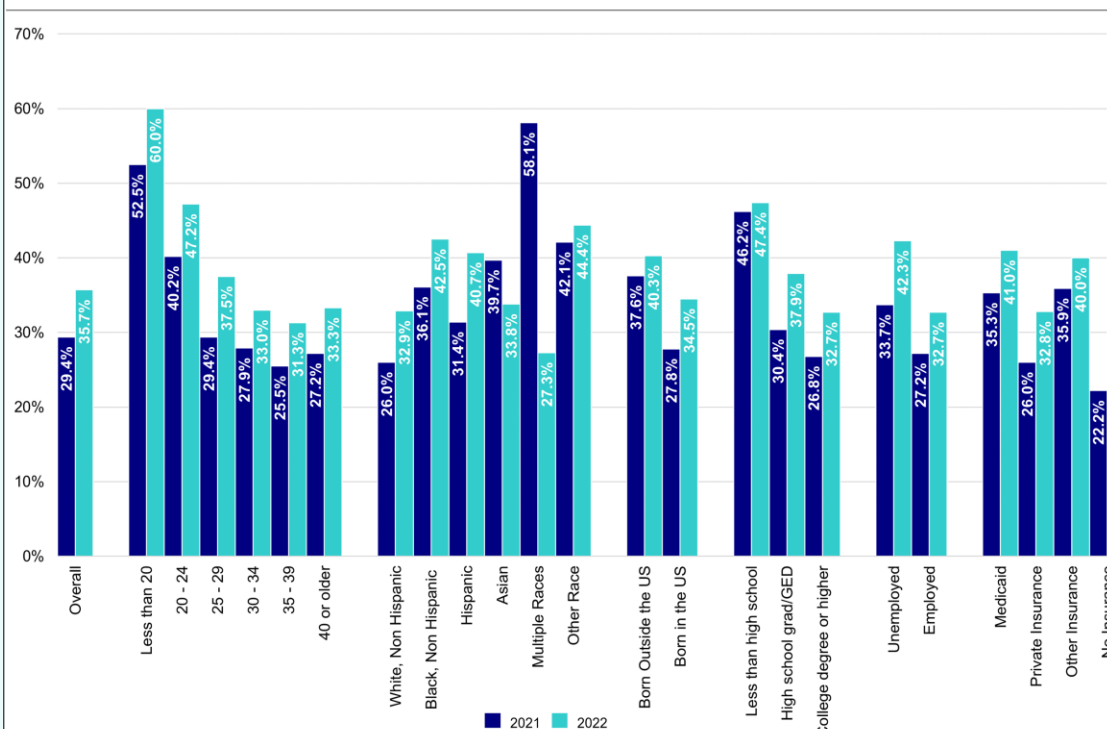
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Fig 2. Percent of Births in Dutchess County with Less Than Adequate Prenatal Care Utilization by Socioeconomic and Demographic Characteristics¹



1. Statistically significant difference (p < 0.05) between adequate and less than adequate prenatal care utilization for each socioeconomic/demographic characteristic displayed
 2. Total births 2021: 2,436, total births 2022: 2,454
 3. Births missing gestational age at birth, number of prenatal care visits, or prenatal care initiation date excluded from analysis (2021 – 227, 2022 – 23)